

In the Claims:

- 1 1. (Currently amended) Method of ~~[[for the]]~~ evaluating ~~[[of]]~~  
2 an installation location (p2) of an acceleration sensor  
3 assembly (2) in a vehicle (3) with respect to ~~[[the]]~~  
4 transmission characteristics to ~~[[this]]~~ the installation  
5 location (p2) of acceleration impulses (s1a, s1b) acting on  
6 the vehicle (3), with a following serially-connected  
7 evaluating circuit (s7), especially for ~~[[the]]~~ triggering  
8 (s8) ~~[[of]]~~ occupant protection devices,  
9 a) in which a prescribed acceleration impulse (s1a,  
10 s1b, ...) is impressed at at least one prescribed  
11 position (p1a, p1b, ...) on the vehicle to produce an  
12 impulse response, the impulse response is measured at  
13 the installation location,  
14 b) ~~[[the]]~~ a frequency spectrum ( $a(f)_{\text{actual}}$ ) of the impulse  
15 response is determined,  
16 c) and the installation location (p2) is evaluated  
17 through comparison of ~~[[this]]~~ the frequency spectrum  
18 with a prescribed nominal spectrum ( $a(f)_{\text{nominal}}$ ).

Claims 2 to 9 (Canceled).

- 1 10. (Currently amended) Method according to claim 1, in which  
2 a broadband norm signal (s1b), especially a white noise or  
3 a pseudo-random sequence, is impressed on the vehicle, the  
4 impulse response measurable at the installation location  
5 (p2) is measured, therefrom ~~[[the]]~~ a transmission  
6 characteristic is determined via a

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7 Fast-Fourier-Transformation and compared with a prescribed  
8 nominal characteristic ( $a(f)_{\text{nominal}}$ ).

1 11. (Original) Method according to claim 10, wherein the norm  
2 signal is impressed at various different impact points on  
3 the vehicle, and the transmission characteristics of the  
4 various different impact points are compared with the  
5 nominal characteristic and additionally with one another.

1 12. (Currently amended) Method according to claim 10, wherein  
2 the norm signal ( $s_{1b}$ ) is impressed at the installation  
3 location ( $p_2$ ) of the acceleration sensor assembly, and  
4 ~~[[the]]~~ components reflected in the vehicle are evaluated  
5 while screening out ~~[[the]]~~ a direct input coupling.

Claim 13 (Canceled).

1 14. (Currently amended) Method for ~~[[the]]~~ evaluating ~~[[of]]~~ an  
2 installation location of an acceleration sensor assembly in  
3 a vehicle with respect to ~~[[the]]~~ transmission  
4 characteristics to this installation location of  
5 acceleration impulses acting on the vehicle, with a  
6 following serially-connected evaluating circuit, especially  
7 for ~~[[the]]~~ triggering ~~[[of]]~~ occupant protection devices,  
8 a) wherein a vehicle simulation program that can be  
9 carried out on a data processing system is provided,  
10 b) to which acceleration impulses are prescribed at  
11 prescribed impact points on the vehicle,

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12 c) by means of the vehicle simulation program, ~~[[the]]~~  
13 impulse responses at the installation location are  
14 simulated, and the installation location is evaluated  
15 through comparison of ~~[[the]]~~ a frequency spectrum of  
16 ~~[[the]]~~ simulated impulse responses with a prescribed  
17 nominal spectrum.

Claim 15 (Canceled).

1 16. (Currently amended) Method according to claim 1, in which  
2 a plurality of various different acceleration impulses  
3 (sla) to be expected ~~[[in the]]~~ during operation of the  
4 vehicle are impressed at various different impact points of  
5 the vehicle.

1 17. (Currently amended) Method according to claim 16, in which  
2 a group of safety-harmless acceleration impulses, for which  
3 no triggering of occupant protection devices is necessary,  
4 are impressed, wherein the installation location is  
5 evaluated regarding to what extent ~~[[the]]~~ frequency  
6 spectra of the impulse responses to ~~[[these]]~~ the  
7 safety-harmless ~~impulse signals~~ acceleration impulses do  
8 not exceed the prescribed nominal spectrum  $(a(f)_{\text{nominal}})$ .

1 18. (Currently amended) Method according to claim 17, wherein  
2 additionally a group of safety-critical acceleration  
3 impulses, for which a triggering of occupant protection  
4 devices is necessary, are impressed, wherein the

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5 installation location is evaluated regarding to what extent  
6 ~~[[the]]~~ frequency spectra of the impulse responses to  
7 ~~[[these]]~~ the safety-critical impulse signals acceleration  
8 impulses exceed the prescribed nominal spectrum ( $a(f)_{\text{nominal}}$ ).

1 19. (Currently amended) Method according to claim 1, wherein  
2 the nominal spectrum ( $a(f)_{\text{nominal}}$ ) is determined from:

- 3 a) ~~[[the]]~~ a frequency response characteristic of ~~[[the]]~~  
4 a sensor of the acceleration sensor assembly that is  
5 to be installed at the installation location and  
6 b) ~~[[the]]~~ a frequency response characteristic of ~~[[the]]~~  
7 mechanical components of the sensor assembly and  
8 c) a characteristic of the following serially-connected  
9 evaluating circuit.

1 20. (Currently amended) Method according to claim 16, in which  
2 additionally ~~[[the]]~~ a frequency response characteristic of  
3 ~~[[the]]~~ a sensor used for the measurement of the impulse  
4 response directly at the installation location is taken  
5 into consideration.

1 21. (Currently amended) Method according to claim 16, wherein  
2 ~~[[the]]~~ impulse responses to the various different  
3 acceleration impulses that are to be expected ~~[[in the]]~~  
4 during operation of the vehicle, which impulse responses  
5 are measurable at the installation location, are weighted  
6 with a weighting function (G) and provided to the following  
7 serially-connected evaluating circuit, wherein the

8 evaluating circuit generates ~~[[a]]~~ corresponding output  
9 ~~signal~~ signals from the impulse ~~response~~ responses  
10 respectively corresponding to a prescribed evaluating  
11 algorithm, and in the evaluation of the installation  
12 location, additionally, ~~[[the]]~~ a comparison of the output  
13 signals with nominal output signals respectively prescribed  
14 for the ~~impressed~~ acceleration impulse impulses is carried  
15 out.

1 22. (Previously presented) Method according to claim 21,  
2 wherein the weighting function (G) is derived from the  
3 reciprocal of the nominal spectrum ( $a(f)_{\text{nominal}}$ ).

1 23. (Currently amended) Method according to claim 21, wherein  
2 the evaluating algorithm of the evaluating circuit includes  
3 an integration of the respective acceleration impulse over  
4 a time window, and in the evaluation of the installation  
5 location, a comparison of the impulse response, which is  
6 weighted and integrated over this time window, with a  
7 nominal integration value for the respective ~~impressed~~  
8 acceleration impulse is carried out.

1 24. (Previously presented) Method according to claim 10,  
2 wherein one or more maximum length sequences  
3 (MLS-sequences) are used as the norm signal (slb).

1 25. (Currently amended) Method according to claim 14, wherein  
2 the vehicle simulation program is based on the real

3 transmission characteristics determined according to a  
4 method for ~~[[the]]~~ evaluating ~~[[of-an]]~~ the installation  
5 location (p2) of ~~[[an]]~~ the acceleration sensor assembly  
6 (2) in ~~[[a]]~~ the vehicle (3) with respect to the real  
7 transmission characteristics to this installation location  
8 (p2) of real acceleration impulses (sla, slb) acting on the  
9 vehicle (3), with ~~[[a]]~~ the following serially-connected  
10 evaluating circuit (s7), especially for ~~[[the]]~~ triggering  
11 (s8) ~~[[of]]~~ the occupant protection devices,

- 12 a) in which a prescribed real acceleration impulse (sla,  
13 slb, ...) is impressed at at least one prescribed  
14 position (pla, plb, ...) on the vehicle to produce a  
15 real impulse response, the real impulse response is  
16 measured at the installation location,  
17 b) ~~[[the]]~~ a real frequency spectrum ( $a(f)_{\text{actual}}$ ) of the  
18 real impulse response is determined,  
19 c) and the installation location (p2) is evaluated  
20 through comparison of ~~[[this]]~~ the real frequency  
21 spectrum with a prescribed nominal spectrum  
22 ( $a(f)_{\text{nominal}}$ ),

23 wherein a broadband norm signal (slb), especially a  
24 white noise or a pseudo-random sequence, is impressed on  
25 the vehicle, the impulse response measurable at the  
26 installation location (p2) is measured, therefrom the real  
27 transmission characteristic is determined via a  
28 Fast-Fourier-Transformation and compared with a prescribed  
29 nominal characteristic ( $a(f)_{\text{nominal}}$ ).